ORA'S ALTERNATIVE EVSE PILOT PROPOSAL, THE CALIFORNIA ELECTRIC VEHICLE INFRASTRUCTURE PILOT

Pursuant to Rule 11.1 of the California Public Utilities Commission's Rule of Practice and Procedure, the Office of Ratepayer Advocates (ORA) files this motion requesting that the Commission consolidate the Application of Southern California Edison Company for Approval of its Charge Ready and Market Education Programs (Charge Ready Program) and the Application of Pacific Gas and Electric Company for Approval of its Electric Vehicle Infrastructure and Education Program (EVI Program) with the Order Instituting Rulemaking (R.) to Consider Alternative-Fueled Vehicle Programs, Tariffs, and Policies (R.13-11-007) (AFV OIR) and hold proceedings to consider and adopt ORA's proposed California Electric Vehicle Infrastructure Pilot (Cal EVIP) Program. SDG&E's, SCE's and PG&E's applications involve sufficient common issues of law and fact to justify consolidation. Consolidating these proceedings and initiating new proceedings to consider and adopt the Cal EVIP program will jump start EV charging station infrastructure deployment in the three IOUs' service territories; promote administrative efficiency; and conserve the Commission's and parties' resources, all while developing fundamental policy issues for State-wide electric vehicle infrastructure that is in a separate track of the AFV OIR.

I. INTRODUCTION

Various stakeholders, including ORA, met on March 25, 2015 to discuss policy concerns across all three investor owned utilities' (IOUs) electric vehicle infrastructure applications. These policy issues include ratepayer funding, anti-competitive impacts, administration of marketing, education and outreach (ME&O) efforts, methods to alleviate electric vehicle supply equipment (EVSE) barriers, EVSE deployment in disadvantaged communities, and cost-effectiveness methodology. ORA recommends that the Commission address these broad policy issues in a new, separate track of the Alternative-Fueled Vehicle Order Instituting Rulemaking ((R.) 13-11-007). However, to accelerate Electric Vehicle (EV) charging station infrastructure deployment, ORA also

asks the Commission to hold proceedings to consider and approve its alternate proposal for deployment of IOU electric vehicle infrastructure pilots.

ORA respectfully requests the Commission to:

1) Consolidate SCE's Charge Ready Program and PG&E's EVI Program with the AFV OIR and SDG&E's VGI Pilot Program;

2) Following consolidation, the Commission should schedule a prehearing conference to schedule proceedings to consider and adopt ORA's proposed California Electric Vehicle Infrastructure Pilot (Cal EVIP) Program;

3) Direct SDG&E, SCE and PG&E to file new applications for pilot programs that comport with ORA's recommended Cal EVIP program;

4) Hold in abeyance SDG&E's VGI Pilot Program;

5) Hold in abeyance SCE's Charge Ready Program;

6) Hold in abeyance PG&E's EVI Program; and

7) If the Commission adopts the above recommendations, the hearing on SDG&E's application should be taken off calendar.

II. DISCUSSION

A. The Commission Should Consolidate SCE's Charge Ready Program and PG&E's EVI Program with the AFV OIR and SDG&E's VGI Pilot Program

ORA recommends that the Commission consolidate SCE's Charge Ready Program and PG&E's EVI Program with the AFV OIR and SDG&E's VGI Pilot Program based on these common questions of law and fact:

1. What is the utilities' appropriate role in developing and supporting EV charging infrastructure?

2. How can the Commission balance the benefits of utility ownership of EV charging infrastructure against the competitive limitation that may result from that ownership?

3. What financing opportunities are available to defray ratepayer costs? The scope of R.13-11-007 includes exploring how financing opportunities can unlock long-term value in EVs or reduce upfront costs as a means of accelerating EV adoption and infrastructure deployment.

4. How can the Commission structure the administration of marketing, education and outreach (ME&O) efforts, such that: (1) customers are educated in a competitively neutral manner; (2) duplicative spending on separate marketing by the utilities is eliminated; and (3) customers receive clear, accurate, and coherent information that explains the electric vehicle program and its importance towards meeting California's larger climate change strategies?

5. What policies, practices, and procedures and methods should the Commission adopt to alleviate EVSE barriers, enhance EVSE utilization, and promote EV adoption in underserved markets including multi-unit dwellings and workplaces?

6. What policies, practices and procedures can best ensure that EV charging station deployment in the target market of disadvantaged communities encourages EV adoption?

The Commission should consolidate all three IOU applications to ensure that these common issues are addressed consistently. Further, consolidated proceedings to consider and adopt Cal EVIP offers an opportunity to obtain pilot data and results that can inform the Commission's development of a consistent set of policies, practices and procedures for EVSE infrastructure in the State.

B. The Commission Should Schedule Proceedings to Consider and Adopt ORA's Cal EVIP Program To Jumpstart Deployment of Electric Cars in California

Cal EVIP anticipates deploying EV charging station infrastructure in all three IOU service territories without delay, to both support California's EV goals and bolster third-party EVSP businesses and minimize ratepayer funding of electric vehicle infrastructure. Under Cal EVIP, each IOU will have an opportunity to deploy EV charging station infrastructure pilots according to its customer base. Implementing Cal EVIP will identify strategic locations for EV charging station siting to increase EV adoption and will assess the effect of an increase in EVSE on EV adoption. Under Cal EVIP, the IOUs do not own charging stations, thereby eliminating the anti-competitive market issue that concerns many parties. But Cal EVIP may identify areas where IOU ownership of charging stations is warranted which will in turn increase EV adoption.

ORA's alternative approach to EVSE deployment expedites the deployment of EV charging stations in California while fundamental policy issues that are common to all or some of the IOU applications are considered concurrently in the AFV OIR through a stakeholder-led process. The development of a consensus based program design and implementation framework in the AFV OIR, including tools, methodologies, metrics, data analysis techniques, and reporting requirements, should converge with Cal EVIP and inform and shape effective future full-scale EV infrastructure programs. Instead of delaying deployment of EV infrastructure, Cal EVIP will start the process in three statewide pilots while the Commission and the parties wrestle with fundamental policy concerns in a separate track of the AFV OIR.

1. Cal EVIP OBJECTIVES

The objectives of Cal EVIP include, but are not limited to:

1) Testing methods to identify strategic locations for charging stations that will increase EV adoption and Zero Emission Vehicle (ZEV) miles driven;

2) Testing how siting infrastructure at these locations affects EVSE use and load on distribution circuits;

3) Gathering and analyzing data on non-EVSE related barriers to EV adoption, including EV rates and bill impacts.

4) Gathering and analyzing data on the role that post-site selection factors play in EVSE utilization. These factors include but are not limited to:

- Parking space access;
- Interest in installing a minimum number of EV chargers
- Interest in Level 1 or Level 2 chargers;
- Interest in future participation in demand response; and
- Interest in adopting managed charging or scheduling plans.

5) Gauging the impact of ratepayer funded charging station infrastructure on charging station deployment, including the effect of:

- Reduced EV Supply Infrastructure costs on enrollment in Cal EVIP;
- EV charger rebates on EVSE deployment;
- Site owners' willingness to permit construction of make ready infrastructure; and
- Site owners' willingness to grant IOUs an easement, if necessary, to install make ready infrastructure.

6) Refining cost estimates for EV charging station related infrastructure and EV chargers, including identifying the sites that require distribution infrastructure upgrades.

2. DATA GATHERING AND ANALYSIS, REPORTING & PROGRAM MODIFICATIONS

Cal EVIP would require the IOUs to collect data from a variety of sources including EV charger information technology and communications software, site owner and EV driver surveys, and distribution infrastructure capacity surveys. Under Cal EVIP, the IOUs will submit this data and related findings to the Commission and stakeholders quarterly. Once this data is collected, elements of Cal EVIP can be modified to increase its effectiveness.

3. Cal EVIP SCOPE AND SCALE

The IOUs should build EV infrastructure to support EV charging stations. The EV infrastructure will include the EV Service Connection and EV Supply Infrastructure (as defined by PG&E in its application and shown in Figure 1, titled "PG&E Company EV Program Distribution Infrastructure" attached below). For purposes of Cal EVIP implementation, ORA recommends the following for each service territory:

- 350 EV charging stations to be deployed in SDG&E's service territory;
- 1500 EV charging stations to be deployed in SCE's service territory; and
- 1700 EV charging stations to be deployed in PG&E's service territory.

ORA's estimates are based on the 1500 charging stations SCE proposed for its Phase 1 pilot. The 1500 charging stations were then scaled by the number of customers that each of the IOUs have in their service territory—the scaling uses SCE's 14 million customers as the base. The number of customers in PG&E's and SDG&E's service territories are 16 million and 3.3 million customers , respectively. As 350 EV charging stations may not be sufficient to promote EV adoption in SDG&E's service territory, ORA recommends that 500 EV charging stations be deployed in SDG&E's service territory.

4. Cal EVIP LENGTH

Typically, pilots should be deployed for a sufficient period of time to collect data to verify if the pilot goals were achieved and identify the barriers to its success. ORA recommends that data obtained from the Cal EVIP should be reported on a quarterly basis for 12 to 18 months. This will allow sufficient time to identify and address potential barriers to EVSE deployment including EVSE site selection, obtaining approval from site hosts, and development of managed EV charging plans.

5. Cal EVIP COST

SCE estimates that Phase 1 of its proposed pilot will cost approximately $21.6 million. This includes $5.85 million for EV charger rebates, $3 million for broad ME&O, and $0.5 million for program-specific outreach. Without these elements, the pilot costs approximately $12.25 million. ORA recommends that each IOU should be authorized a budget according to its pilot size, plus: (1) an additional $0.5 million for pilot-specific marketing and outreach efforts (at this time, ORA recommends that Cal EVIP should only include funding for pilot-specific marketing and outreach efforts), and (2) an additional amount to include rebates as described below.

Based on ORA's recommended pilot size for each IOU and using SCE's estimated cost of $12.25 million to install 1500 charging stations, PG&E should be authorized $14.38 million to install 1700 charging stations and SDG&E should be authorized $4.58

million to install 500 charging stations. These estimates exclude funds authorized for charging station rebates.

6. COST ALLOCATION (During the Implementation of Cal EVIP)

A. EV Service Connection (distribution side of the meter) – ORA recommends that the distribution infrastructure including transformer, service drop and meter be rate-based.

B. EV Supply Infrastructure (landowner side of the meter, e.g., panel, conductor) – ORA recommends that the EV supply infrastructure (also referred to as the "make ready" component) be rate-based. By owning the EV Supply Infrastructure, the IOUs may be able to better ensure proper operation and maintenance. The issues of right of way or land easement would need further exploration.

C. Charging Stations (kiosk, pedestal, charger) and Installation – If the Commission determines that some form of rebates for chargers in charging stations may be necessary to help increase EV charging station deployment and EV adoption, then ORA would support partial ratepayer funding of rebates for the EV charging stations during the implementation of Cal EVIP. Rebates should only cover a small portion of the actual charging station cost to serve as an incentive rather than a subsidy.

SCE proposes rebates for qualified charging stations in an amount that reflects the base cost (up to $3,900) for functionalities established by SCE and connection of those charging stations to SCE's infrastructure. SCE intends to qualify charging stations according to three minimum functionality profiles:

1) Level 1 charging station, without network capability;

2) Level 2 charging station, with network capability integrated into the charging station; and

3) Level 2 charging station, with network capability provided by an external device (such as a kiosk or gateway) shared among multiple stations.

ORA's rebate recommendation in Cal EVIP is as follows. Rebates should only comprise 25% of the base cost, with a cost cap. The base cost will depend on the results of a request for information (RFI) process yet to be conducted, similar to that proposed

in SCE's Charge Ready Program. The rebate of 25% will be offered in two stages: first, 15% of the base cost can be offered upon installation of the charging stations, and then the remaining 10% of the rebate can be offered upon a showing of sufficient utilization (i.e. 50% utilization of EV chargers at each site) at the end of the Cal EVIP program. This approximate rebate amount of $1000 on the EV charger base cost cap is similar in scale to EV charger rebates offered by the City of Anaheim for Level 2 chargers.

An EV charger rebate of 25% also mirrors the relative cost of an EV and its associated vehicle credit. For example, the highest listed manufacturer's suggested retail price (MSRP) price of a 2015 model Nissan Leaf is $35,120. This automobile is eligible for a federal Qualified Plug-In Electric Drive Motor Vehicle Credit of $7,500. The Qualified Plug-In Electric Drive Motor Vehicle Credit comprises of approximately 21% of the Nissan Leaf's total cost. As such, a corresponding rebate of 25% of the total cost of EV charging stations is reasonable.

Results from the Cal EVIP will help to better determine the extent that defraying EV charger costs through a 25% rebate is warranted. The metrics to measure sufficient utilization in relationship to rebate amount can be determined during the parallel track in the AFV OIR.

7. MARKETING, EDUCATION & OUTREACH

Cal EVIP contains only pilot specific outreach. ORA recommends that the utilities conduct pilot specific outreach and marketing at this time, while broad outreach of electric vehicle marketing, education, and outreach program should be administered through Energy Upgrade California (EUC).

Conducting broad outreach through EUC to the public would ensure that: (1) customers are educated in a competitively neutral manner; (2) duplicative spending on separate marketing by the utilities is eliminated; and (3) customers receive clear, accurate, and coherent information that explains the electric vehicle program and

California's larger climate change strategies to reduce greenhouse gas emissions through the electrification of the transportation sector.

8. UTILITY ROLE

Under Cal EVIP, the IOUs' role is to facilitate EV infrastructure deployment. This includes upgrades to the distribution system, if required, and deployment of EV Supply Infrastructure on the customer's side of the meter through a request for information (RFI) process.

Cal EVIP does not propose IOU ownership of charging stations at this time. ORA recommends this topic be addressed among other fundamental policy issues in a separate track of the AFV OIR. The IOUs will own distribution upgrades and EV Supply Infrastructure while third parties will own EV Charging Stations. However, implementing Cal EVIP may identify areas where IOU ownership of charging stations is essential to encourage EV adoption.

9. SITING OF EV CHARGING STATIONS

At this time, third-party EVSPs may be better suited to determine where to site EV charging stations than the IOUs. However, ORA recommends that the EVSPs and IOUs target EVSE deployment strategically in areas that will explicitly measure the increase of EV adoption. This could be achieved by classifying geographic areas into three general categories: 1) EVSE developed (areas where there is a high penetration of EVSEs), 2) EVSE semi-developed (areas that deemed to have a moderate level of EVSE penetration), and 3) EVSE minimally-developed (areas that have a sparse level of EVSE penetration). After "EVSE semi-developed" or "EVSE minimally developed" areas have been identified, EVSPs and IOUs could partner to determine if there is interest in EVSEs and if residents would invest in EVs if EV charging stations were available to them. If there is customer interest, and EV charging stations are deployed in these areas, Cal EVIP results will give quantifiable data for the Commission and the parties to determine if increasing EV infrastructure promoted the purchase of electric vehicles.

10. DISADVANTAGED COMMUNITIES

ORA generally agrees that disadvantaged communities , should benefit from any ratepayer funded pilot program in order to encourage EV adoption. ORA acknowledges that due to significant barriers to EV adoption—the relatively high price of EVs in relationship to income level in these communities—EV adoption may be slow. The rate of EV adoption in disadvantaged communities may initially create underutilized or stranded assets. However, deploying charging stations in this sector deserves special consideration because the stations, coupled with ME&O, may encourage people to purchase EVs. In this market sector, ORA recommends siting of EV charging stations in multi-unit dwellings (MuD) versus workplaces. ORA also recommends the deployment of shared charging station models among many MuDs (for example, EV charging stations may be located in one MuD's parking lot, but may be accessible, through service arrangements, by residents from other MuDs). Deployment conducted in this manner may mitigate the potential for stranded assets paid for by ratepayers while increasing exposure to EVs in disadvantaged communities. (It may also lead to a greater geographical diversity of EV charging station deployment that may ultimately encourage more EV adoption.

Cal EVIP may identify areas where IOU ownership of charging stations is essential to encourage EV adoption in future deployment. Due to a potentially low EV adoption rate in disadvantaged communities, and third party EVSPs' possible reluctance to conduct business in what now may be a low-profit area, the disadvantaged community sector may be one where IOUs may better serve the market. A ratepayer funded deployment of EV charging infrastructure and charging stations would add charging infrastructure in areas that would otherwise not be served by third party EVSPs. Using ratepayer funding in this market would also avoid ratepayer funding for charging stations that would otherwise be installed regardless if ratepayer funding was present or not—the "free ridership" problem.

XIII. CONCLUSION

If implemented by the Commission, Cal EVIP will start the process of EV charging station infrastructure deployment in the service territories of the three IOUs—PG&E, SCE and SDG&E. Cal EVIP will encourage a competitive EVSE market and leverage third-party investment by encouraging third party EVSPs to take advantage of EV charging station infrastructure deployment. ORA recommends that the Commission consolidate SCE's Charge Ready Program and PG&E's EVI Program with the AFV OIR and SDG&E's VGI Pilot Program and hold proceedings to consider and adopt Cal EVIP so that fundamental policy issues that are common to all the IOU applications can be discussed in parallel through a separate track of the AFV OIR.

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